

MATERIAL SAFETY DATA SHEET

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

DOWELL PRODUCT CODE: **H028** Effective Date: 01-March-2000

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation:

HYDROCHLORIC ACID 28% H28

Company/undertaking identification: Dowell Safety/Environment - Worldwide
300 Schlumberger Drive
Sugar Land, Texas 77478, USA

Corporate Emergency Phone: USA 1-281-595-3518
Corporate Non-Emergency Phone: USA 1-281-285-7873

2. COMPOSITION/INFORMATION ON INGREDIENTS

HYDROCHLORIC ACID; CAS 7647-01-0;
WATER; CAS 7732-18-5;

3. HAZARDS IDENTIFICATION

Emergency Overview

Form: Liquid
Color: Colorless - slight yellow
Odor: Pungent

Main environmental hazards:
None known.

Main Physical Hazards

Special Precautions: None.
Physical Hazard: Corrosive to metals

Main Health Hazards:

HMIS RATING: Health 3 Flammability 0 Reactivity 1

Causes burns to mouth, throat and stomach. Causes severe eye burns. Causes burns to respiratory tract. Causes severe skin burns.

See Section 11 for a complete discussion of health hazards.

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 30 minutes while holding eyelids open. Seek medical attention at once.

Skin contact: Immediately remove contaminated clothes and shoes. Wash with soap and water for 15 minutes. Seek medical attention.

Inhalation: Remove to fresh air. Seek medical attention at once. If breathing has stopped, begin artificial respiration.

Swallowing: DO NOT induce vomiting. Drink large quantities of milk (preferred) or water and give milk of magnesia. Seek medical attention at once.

Notes: None.

5. FIRE FIGHTING MEASURES

Extinguishing media:	None needed
Further Information:	May release hydrogen gas (explosive) on contact with metals.
Flash point:	Not combustible.
Method:	Not applicable
Flammability (explosion limits in air):	
Lower:	Not applicable
Upper:	Not applicable
Autoflammability (auto-ignition temperature):	Not applicable
Explosive properties (thermal decomposition temperature):	Not determined
NFPA Rating: Health 3 Flammability 0 Reactivity 1 Other: None	
Combustion products: see Section 10.	

6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage:	Contain with dikes. Neutralize with soda ash or lime. Put in plastic drum.
See Section 8 for protective equipment information.	
See Section 13 for disposal information.	

7. HANDLING AND STORAGE

Special Precautions:	Store in well ventilated area out of direct sunlight.
Packaging requirements:	High density polyethylene (HDPE) drum or can.
Ventilation:	Provide ventilation to keep airborne concentrations below exposure limits.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection:	Use NIOSH approved respirator with organic vapor/acid gas protection (color coded yellow). Use SCBA (self contained breathing apparatus) in confined areas and for emergencies.
Eye protection:	Chemical splash goggles and face shield.
Hand protection:	Impervious gloves made of: Neoprene
Skin protection:	Chemical resistant suit. Chemical resistant boots.

Exposure Limit Guidelines (mg/m³)

Components having no established limits are not listed.

(NE: Not established, ND: Not determined)

These numbers may be referred to as OEL, MAC, MAK, MEL, OES, REL, PEL, or TLV.

TWA is the 8 hour time weighted average. STEL is the short term exposure limit.

"C" indicates the value is a maximum concentration (ceiling).

	HYDROCHLORIC ACID		
	TWA	STEL	ANM
CANADA	ND	ND	
USA: ACGIH	NE	7.5 C	
USA: OSHA	NE	7 C	

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless - slight yellow
Odor:	Pungent
pH value:	<2 (68°F)
Boiling point:	207°F
Pour point:	< 32°F
Vapor pressure:	0.65kPa (68°F)
Relative density (specific gravity):	1.142 (60°F)
Bulk Density (solids):	Not applicable
Solubility in water:	Soluble 68°F
Viscosity:	1.423mPa.s (68°F)
Relative Vapor Density (air=1):	>1
% Volatile:	100
Nature	Acid

10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions to avoid:	None.
Materials to avoid:	Metals Bases Oxidizers
Hazardous Polymerization:	Will not occur.
Dust explosion hazard (solids):	Not applicable.
Special hazards:	None.
Hazardous decomposition products:	Hydrogen chloride, oxides of choride May release hydrogen gas (explosive!) when in contact with metals.

11. TOXICOLOGICAL INFORMATION

Eye contact:	Corrosive. Rapidly causes pain, burns, corneal injury. May cause permanent damage and blindness.
Skin contact:	Corrosive; rapidly causes pain, burns, redness, swelling and damage to tissue.
Inhalation:	Corrosive. Short exposure can injure lungs, throat, and mucous membranes. Causes pain, burns, choking, and coughing.
Ingestion:	Corrosive; causes pain and severe burns to mouth, throat and stomach.
Carcinogenicity:	Not listed by IARC, USA NTP, or USA OSHA.
Mutagenicity:	Not known to cause heritable genetic damage.
Teratogenicity:	Not known to cause birth defects.
Target organs which may be affected:	None known.
Sensitization:	Not known to cause allergic reaction.
Other:	Prolonged exposure at low concentration may cause erosion of the teeth.

12. ECOLOGICAL INFORMATION

Information on product as a whole:

Main environmental hazards:	None known.
Degradability:	Not applicable
Fish Toxicity:	Low toxicity to fish.

13. DISPOSAL CONSIDERATIONS

Product:	Neutralized material is generally acceptable in sanitary sewers; check local regulations.
Container:	Sell drum to an approved drum reconditioner or triple rinse, crush, and ship to sanitary landfill unless prohibited by local regulations.
USA EPA RCRA:	D002

14. TRANSPORT INFORMATION

ICC Tariff Classification	Compound, Gas or Oil Well Drilling				
ICC Item Number:	138640	ICC Class:	50	LTL	35 TL
CERCLA RQ:	Not established.				
Department of Transportation (DOT)					

Designation:	Hazardous Material
Hazard Class:	8
Shipping Name:	Hydrochloric acid solution (28%), 8, UN 1789 PG II
DOT Label:	Corrosive 8

Canadian Shipments

Shipping Name:	Hydrochloric acid solution (28%)		
Label:	Corrosive 8		
Classification:	8, 9.2	Package Group:	II PIN: UN 1789

15. REGULATORY INFORMATION

Notification/restrictions status:

USA:

All components of this material are on the USA TSCA inventory, or the components are exempt from inventory reporting.

CANADA:

All components of this material are on the Canada DSL, or the components are exempt from inventory reporting.

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of USA Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372:

HYDROCHLORIC ACID; 7647-01-0; 28%

The USEPA CERCLA Reportable Quantity (RQ) for this product as a whole is: Not established.

Canadian WHMIS classification: E ,D2B,E

16. OTHER INFORMATION

Sections affected by last revision:

TRANSPORT INFORMATION

*Mark of Schlumberger. The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Dowell regarding the accuracy or completeness of the information.